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ABSTRACT

The School Values Inventory (SVI) was used to examine teacher preferences concerning managerial practices of high schools in Shanghai. The SVI includes subscales of organizational values as formality, bureaucratic control, participation, collaboration, and teacher autonomy. When the 50-item instrument was administered to 980 teachers from 27 randomly selected Shanghai schools, most teachers indicated a greater preference for participation and collaboration, increased communication and consensus about the schools goals, and greater discretion in their daily work. Principal component analysis between the teacher's personal values and the school's espoused values was used to classify values as strong, moderate, weak, or conflicting. Strong values, for example, were those with greater degrees of sharing of organizational values between the teacher and the school. In general, the findings suggest four managerial strategies. School management should stress the partnership between administrators and teachers rather than the superordinate-to-subordinate relationship, thus emphasizing participation and collaboration. School managers should create a school that is goal-oriented with an emphasis on communication and consensus. Ideally the school should be professionally oriented and should allow teachers significant discretion in the workplace, especially evaluating their own performance and setting their own goals. (Contains 26 references, 3 figures, and 3 tables.) (Author/RKJ)

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A Preliminary Study of Managerial Practices of High Schools in Shanghai

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ED 454 597

ABSTRACT

A theoretical framework which assesses organizational cultures of schools and a self-created instrument, the School Values Inventory (SVI), have been well established in the context of Hong Kong schools. Another study was launched in order to test the general applicability of the theoretical framework and the instrument and to explore managerial practices of schools in other contexts. Shanghai schools were proposed to be the subjects of the study because after 1997 mainland China and the Hong Kong Special Administrative Region have increasingly interrelated; Shanghai is under the rule of a socialist government, whereas Hong Kong's government is capitalist; and Shanghai and Hong Kong, as the biggest metropolitan areas in China, share many comparable features that they can learn much from each other. While the researcher has found a wealth of literature and research results concerning many aspects of educational development in both mainland China and the HKSAR, however, the researcher has discovered that there is a scarcity of large-scale empirical research that has investigated school administration and management in mainland China at the more microscopic level. The objective of this research is to enrich the literature in this respect and to add to the few case studies on school management in mainland China.

This study has based on Schein's model (1985, 1992) of levels of organizational culture which consists of assumptions, values and norms, each occurring at a different level of depth. The model provides an operational framework to study organizational cultures within schools with a view of culture as something an organization *has* and with an *etic* perspective. Values were chosen as the element of culture to be assessed quantitatively, because values are often expressed openly and directly by organizational members and because values when compared to basic assumptions, are potentially more measurable, testable and verifiable quantitatively.

A preliminary study of managerial practices of high schools in Shanghai was launched, in order to test the validity and reliability of both the theoretical framework and the SVI. The SVI includes subscales of organizational values grounded in school culture research with dimensions of organizational values in schools as formality, bureaucratic control, participation, collaboration, collegiality, goal orientation, communication, consensus, professional orientation and teacher autonomy. The SVI originated in the Hong Kong context was further developed and adapted in the Shanghai context. The adapted SVI printed in simplified-characters was administered to 980 teachers from 27 randomly selected high

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schools in Shanghai. Reliability and internal consistency analyses were performed in order to refine the quality of the questionnaire. Furthermore, in order to investigate additional relationships between items in different scales, factor analyses on the data from the sample were performed. The initial findings of the study indicate that the items were clustered into seven major scales of organizational values with reliability coefficients ranged from 0.80 to 0.87 and that most teachers in the Shanghai high schools had greater preference for participation and collaboration, collegiality, goals orientation, communication and consensus, professional orientation as well as teacher autonomy, but less preference for formality and control. The implication of the study is that the policy decision made by the Central Committee of the Communist Party of China since May 1985 to decentralize educational management should be further reviewed and that authority should not only be decentralized from the Central to the school level, but also from the school level to the teacher level, if greater organizational flexibility and adaptability in schools are promoted in the new millennium.

The findings of this study make several theoretical and practical contributions: (i) a better understanding of specific areas of organizational theory within the field of educational administration; (ii) an addition to the literature of organizational culture which appears to be the latest trend in the Theory Movement; (iii) an exploration of the managerial practices and organizational cultures of schools in Shanghai; and (vi) the promotion of intellectual exchanges between academic institutions and schools in Shanghai and those in Hong Kong.

Key words: educational administration, organizational culture, Shanghai school

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A Preliminary Study of Managerial Practices of High Schools in Shanghai

Since the Sino-British Joint Declaration in 1984, the British and Chinese Government had agreed that from 1997 Hong Kong ceased to be a British Colony and became a special administrative region under the sovereignty of China (Hong Kong Government, 1990). Hong Kong now as the Special Administrative Region (HKSAR) of China has its own government and laws.

In the education sector we have already had our extensive educational reforms since the Visiting Panel's report in February 1984 and the various issues of the Commission Reports (ECR Nos. 1-7). On the other hand, in the mainland China, in May 1985 the Central Committee of the Communist Party of China held a national education conference and a decision was made on 27 May to reform the educational structure. 'One Country, Two Systems' has been a very new policy in the world that no historical records and experiences may be shared for the future. Socialism and Capitalism are on the two opposite extremes that the merging of them would be difficult and more conflicts will appear as the contacts by the people on both sides increase more. Although it is guaranteed that the HKSAR systems would remain unchanged for fifty years next to 1997, the mutual influence on each other by the two systems and subsequent mutations raised would be carried on inevitably. In the merging, there are so many aspects that the education systems of the Mainland China and the HKSAR can learn from each other, including experiences in the provision of nine-year universal education, in the provision of technical and vocational education, in teaching profession and teacher training, in educational cost and financing, in language of instruction and so forth. The researcher of this study find that there is a wealth of literature and research (Cheng, 1990; Ji, 1992; Lo, 1993; Pepper, 1995; Yun and Zhang, 1992; Xiao and Tsang, 1999) concerning many aspects in the educational development in both Mainland China and the HKSAR. However, the researcher discovers that there is a scarcity of large-scale research that investigates school administration and management in the Mainland China at a more microscopic level. This research is launched in order to enrich the literature in such respect, in addition to only few of the case studies on school management (Fan, 1992; Wu, 1993).

In light of the return of Hong Kong to China in 1997, the increasingly interrelations between the HKSAR and Mainland China and the quest for quality school education in both the HKSAR (Education Commission, 1997) and Shanghai (Cheung, 1997; Wang; 1994), the researchers proposed to conduct a research to explore and examine the managerial practices and organizational cultures of schools in Shanghai. Based on the model of organizational culture suggested by Schein (1985, 1992), which comprises three levels, namely, basic assumptions, values and norms, this study chooses values, the middle level of the model, as the element of culture to be investigated extensively and as a way to understand organizational culture in Shanghai schools.

Theoretical framework

In order to compare schools' performance, reliable and valid indicators for assessment should be developed and tested repeatedly. It is postulated in this study that organizational values are important indicators of managerial practices in schools and degrees of sharing of organizational values are indicative of the strength of organizational cultures. Values are the essence of organizational culture and are so important that many authors define them as the organizational culture. Definitions of organizational culture generally include references to

shared organizational values (Deal and Kennedy, 1982; Sathe, 1983; Deal, 1985; Sergiovanni, 1987). The trappings of culture, the rituals, the stories, the myths and the heroes are the expression of shared organizational values. Values are often expressed openly and directly by organizational members. Values and beliefs, when compared to basic assumptions, are potentially more measurable, testable and verifiable quantitatively (Shaw and Reyes, 1992).

If assessments and comparisons of organizational culture across organizations (and schools) are feasible and practical, cultural constructs expressed in quantitative terms should be identified. It is argued in this study that based on Schein's (1985, 1992) model of levels of organizational culture, Sathe's (1983) interpretation of organizational culture and Getzels and Guba's (1957) model of organizational behaviour, "shared values" within organizations are the appropriate cultural constructs which permit analysis of organizational culture across units.

Schein (1985, 1992) proposed a model of "levels of culture" which consists of norms, values and assumptions as the three respective layers ranging from top to bottom, concrete to abstract, observable to invisible, tangible to intangible and measurable to inaccessible. In this study, values were chosen as the layer of organizational culture to be investigated because values lie at the heart of educational administration and management, values are the forces and processes through which organizational participants are socialized into organizations and "shared values" are the binding forces that hold an organization together (Pang, 1998a).

The second basis on which this study was launched was Sathe's framework of diagnosing organizational culture. Sathe (1983, p.6) defined culture as "the set of important understandings (often unstated) that members of a community share in common." The words "share in common" in the definition are crucial because it provides an objective diagnostic framework to interpret the shared understandings in organizational culture. In Sathe's framework the important shared understandings can be inferred from the shared sayings, shared doings, and shared feelings (Sathe, 1983). When culture is defined as "something that is shared in common," culture has a powerful influence on organizational behaviour because the shared beliefs and values represent basic assumptions and preferences that guide such behaviour and will facilitate communications and higher levels of cooperation and commitment than is otherwise possible. When culture is defined in this way, it enables the strength of organizational cultures to be measured. It enables the researchers to answer systematically whether or not real consensus existed among members in certain areas in the schools. By this, the researchers can then decide whether there is a strong culture, moderate culture, weak culture, or conflicting culture within schools. Thus, in terms of different degrees of sharing of beliefs and values, organizational cultures can be quantified and classified into "strong," "moderate," "weak" and "conflicting" (Pang, 1998b,c).

The third theoretical framework on which the research was based was Getzels and Guba's (1957) model of the administrative process that examines observed behaviour within a social system. In their model, social behaviour is a function of the nomothetic (normative) dimension and the idiographic (personal) dimension of activity in a system. Getzels and Guba's model contributes to the identification of the two dimensions of values in schools to be studied: schools' espoused values and teachers' personal values. In order to have a thorough understanding of school culture, not only should the organizational values of schools be investigated, but also teachers' personal values should be included. By measuring schools' espoused values and teachers' personal values in the daily administrative and managerial practices, the differences between the two groups' values are indicative of the degrees of sharing of values between them and therefore the strength of cultures in the

schools.

When values are at the heart of educational administration, when values are the central element of organizational culture as in Schein's model, when culture is defined as the "something shared in common" in organizations as in Sathe's framework, when "shared values" as the binding forces that hold an organization together, "shared values" appear to be the measurable, testable and verifiable construct of organizational culture. In considering all these ideas, school culture, in this study, was defined as "the pattern of sharing of organizational values between teachers and administrators in the daily practices in schools." Thus the major aim of the study was to investigate organizational cultures existing in Shanghai primary schools in terms of different patterns of sharing of organizational values between schools and teachers as a means to understand the managerial practices in the schools and to investigate the factors which would contribute to the building of quality management cultures.

Methodology

The Instrument and Sample

A self-constructed, standardized instrument, the *School Values Inventory* (SVI) Form V was developed to assess managerial practices in Shanghai high schools with a sample of 981 teachers from 27 high schools randomly selected in Shanghai. The SVI Form V (a Chinese version in simplified characters) was further developed from the SVI Form IV, which have been extensively tested with wide range of teacher samples from secondary schools in Hong Kong (Pang, 1998b). Principal component analysis was used to select the items in data reduction and to establish the validity of the subscales and Cronbach's Alpha was used to test reliability of the derived subscales. The final version of the SVI Form V was a 50-item instrument measuring seven different aspects of managerial practices in Shanghai high schools. The seven developed subscales of organizational values were formality and control, participation and collaboration, collegiality, goal orientation, communication and consensus, professional orientation and teacher autonomy. A sample of the value statements of the SVI Form V is attached in Table 1 for reference. The SVI was designed to assess the educational and administrative values that are espoused by teachers, administrators and principals, and the degrees of sharing of these values among them. Values in this study are simply defined as "taken-for-granted beliefs about the proper functioning of a school." They may mean "the ways we do things here," "what ought to be," and "the ways a school should be operated."

The Organizational Culture Index (OCI)

It has been argued that "shared values" is a measurable, testable and verifiable construct of organizational culture and that organizational culture can be quantified and classified into "strong," "moderate," "weak" and "conflicting" in terms of different degrees of sharing of beliefs and values within an organization. Teachers were asked to rate the value statements twice, first on the similarity of their own values with the value statements and then on the similarity of the schools' organizational values in the daily managerial practices with the value statements. The former gave rise to the dimension of teachers' personal values (TPV) and the latter the dimension of schools' espoused values (SEV). The differences between the TPVs and SEVs would then measure the value divergence between teachers and schools in terms of the seven subscales of organizational values. By taking the differences of

these two scores, a Value Divergent (VD) score was generated for each item for each respondent. The VD scores measured the extent to which the values diverged between teachers and schools; the higher the score, the greater would be the divergence. For the sake of ease of understanding and interpretation in the following analysis, a Value Similarity (VS) score was created and generated from the VD score by reversing its direction and meaning.

From the above scores, two aggregate scores were further generated, one at teacher level and the other at school level. At teacher level, a Total Values Similarity (TVS) score was created for each teacher in the schools. The TVS score was the summation of all the mean VS scores for the seven subscales of organizational values in the questionnaire, the School Values Inventory. It measured the overall extent to which organizational values were shared between a teacher and a school. A high TVS score indicated that the teacher had a high degree of value congruence with the school. On the other hand, at school level, an Organizational Culture Index (OCI) was created for each school. An OCI score was the average value of the TVS scores for a school after summing up all teachers' TVS scores in that school. Thus the OCI measured the extent to which organizational values were shared between teachers and the school and it was an overall assessment of the degree of sharing of organizational values (Pang, 1998b). Since organizational culture in this study was defined as the pattern of sharing of organizational values between teachers and schools in the daily managerial practices, the OCI was an indicator of the strength of organizational cultures in those schools.

Table 1. Subscales and Sample Items of the School Values Inventory Form V (Chinese Version in Simplified Characters)

Formality and Control (10)
1. Teachers must always get their orders from higher up.
2. Regular checks on teachers for rule violations can prevent wrong doing.
Participation and Collaboration (8)
1. Teachers should have participation in decision making.
2. Both teachers and principal are partners, rather than super-ordinates and sub-ordinates, who work together.
Collegiality (6)
1. Teachers and administrators should provide constructive feedback to each other regularly.
2. Teachers should meet together to share their knowledge and experiences.
Goal Orientation (6)
1. At the beginning of school year, the school's general goals should be explained to the new teachers.
2. A work plan which gives an overview of the school goals should be written down.
Communication and Consensus (8)
1. Teachers should be kept well informed on matters of importance to them.
2. The principal should always explain clearly why a decision has been made.
Professional Orientation (6)
1. Teachers are a very highly trained and dedicated group of professionals.
2. Administrators should encourage teachers to set goals for their own growth.
Teacher Autonomy (6)
1. The organizational structure should give considerable autonomy to the departments within schools.
2. Teachers should have freedom to engage in a variety of practices that they think important.

Note. Numbers in brackets indicate the number of items in the subscales.

Results and Discussions

The validity and reliability of the seven subscales of organizational values were established through conducting principal component analysis (PCA) and reliability tests respectively. Principal component analysis was used to screen the value statements as item selection, by which the 50 value statements were included in seven factors (subscales) of organizational values. The seven subscales of organizational values were as follows: Formality and Control (0.79), Participation and Collaboration (0.86), Collegiality (0.82), Goal Orientation (0.84), Communication and Consensus (0.88), Professional Orientation (0.77) and Teacher Autonomy (0.83), with the reliability coefficients (Alphas) provided in brackets. The subscales had reliability coefficients ranging from 0.79 to 0.88. The basic descriptive statistics of the subscales are provided in Table 2.

Table 2. Reliability Coefficients (Alphas) of the Subscales of SVI for Primary Schools in Shanghai

Subscales	No. of Items	Alpha	Mean	SD	N
Formality and Control	10	0.79	4.89	0.90	981
Participation and Collaboration	8	0.86	4.52	1.26	981
Collegiality	6	0.82	4.78	1.15	981
Goal Orientation	6	0.84	5.11	1.13	981
Communication and Consensus	8	0.88	4.68	1.19	981
Professional Orientation	6	0.77	5.11	1.03	981
Teacher Autonomy	6	0.83	4.56	1.08	981

Total No. of Items = 50

Organizational Values of High Schools in Shanghai

Managerial practices in schools can be evaluated by the seven observed variables of organizational values. In the questionnaire, teachers were asked to rate the value statements twice, first to indicate their own values and then to suggest the values espoused by schools. Two profiles, Teachers' Personal Values (TPV) and Schools' Espoused Values (SEV), regarding administration and management in schools were investigated. Figure 1 shows these two profiles in terms of the seven subscales of organizational values. The differences between TPV and SEV, which contributed to the Values Divergence (VD) scores, indicated the value divergence between the two sets of responses. On the contrary, the reverse of VD scores gave rise to the Values Similarity (VS) scores that indicated the extent to which the values were shared between teachers and schools.

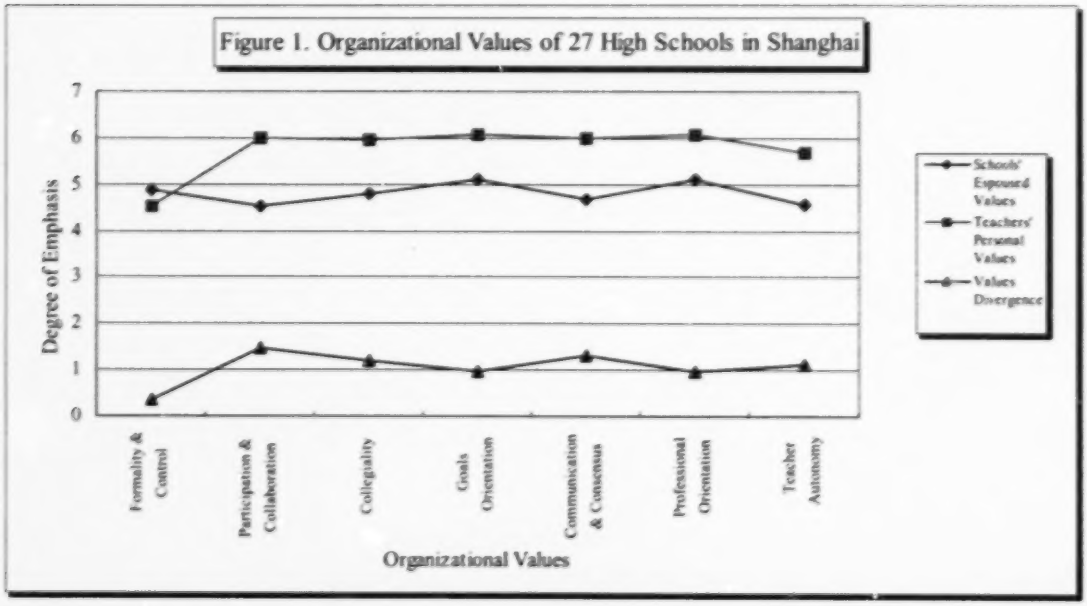
Figure 1 shows that the TPV profile lies well above the SEV profile except for Formality and Control. It is evident that teachers had greater preferences than schools for Participation and Collaboration, Collegiality, Goal Orientation, Communication and Consensus, Professional Orientation and Teacher Autonomy, but lower preferences for Formality and Control in school management. It seems that teachers individually wish to downplay bureaucracy in schools. The findings also show that on other measures, teachers were more demanding than schools regarding the ways a school should be operated.

The profiles indicate that teachers and schools generally had greater divergence in Participation and Collaboration, Collegiality, Communication and Consensus as well as Teacher Autonomy. It is evident that schools are highly centralized and teachers seldom experience involvement in the running of schools. On the other hand, there was least divergence between teachers and schools in Formality and Control, Goal Orientation and Professional Orientation. Teachers generally shared with school administrators the belief that the schools should be goal oriented as well as professional oriented and should have certain degrees of formality and control in order to maintain their proper functioning of the schools.

There is a clear indication of the value divergences between teachers and schools in Figure 1. It is these gaps that school administrators should particularly manage. The bigger the gaps, the greater are the divergences in these values. The smaller the gaps, the greater were the extent to which these values were shared between teachers and schools. It is postulated in this study that it is the value divergence or similarity (sharing) which has direct effects on teacher commitment and job satisfaction (Pang, 1996). Thus the seven subscales of organizational values provided an easy, thorough and effective means to assess managerial practices in schools and provided some hints as to school improvement.

The above discussion illustrates only some of the potential usage of the instrument, SVI. Profiles of values could be applied not only to schools, but also within schools. Each school might have its own profiles indicating the extent to which organizational values were emphasized and which values were shared between teachers and administrators within the school. Thus the SVI is a reliable, valid and easy-to-administer tool for schools to have their own evaluation and is also a device for schools to improve the quality of management.

Figure 1. Organizational Values of 27 High Schools in Shanghai

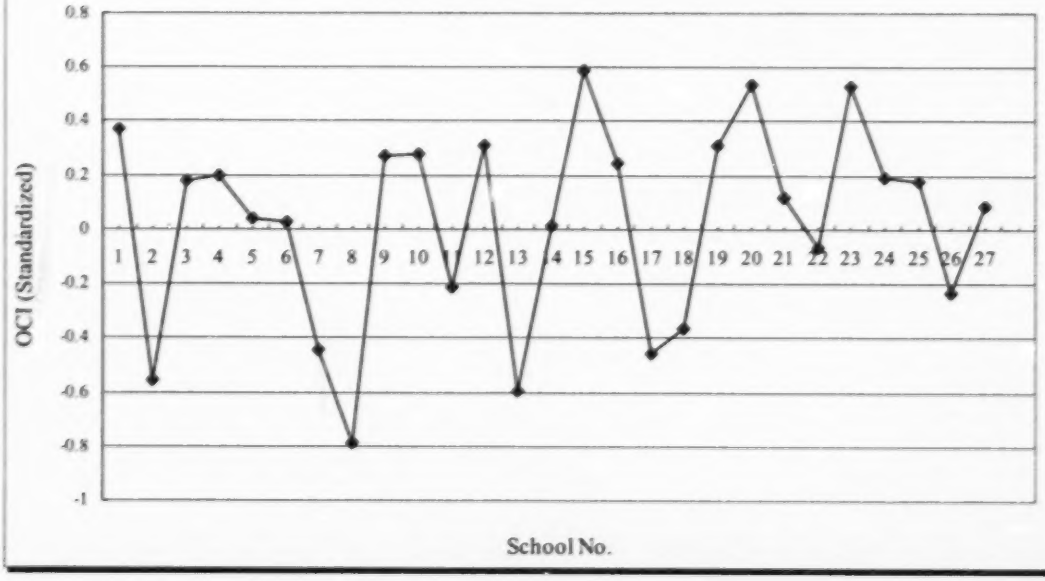


The Strength of Organizational Culture

The cultural contents of all the schools in the sample can be determined by their degrees of emphasis on the seven subscales of organizational values. What then was the strength of organizational cultures or what were the degrees of sharing of these organizational values between schools and teachers? It was proposed that the *Organizational Culture Index* (OCI) generated from the instrument, SVI, was the appropriate construct that could measure the strength of organizational cultures.

Figure 2 shows the profile of the strength of organizational cultures for the 27 high schools in Shanghai. The schools were arranged in an order of their given school numbers and the OCI scores were given as standardized scores with mean equal to zero and standard deviation equal to one. The profile shows that different schools had different strengths of organizational cultures. "Strength" is a relative term that involves comparison to a standard or norm. For the sake of ease of understanding and interpretation, these 27 schools were roughly classified into four categories according to their strength of organizational cultures: "strong culture," "moderate culture," "weak culture" and "conflicting culture." It was arbitrarily and subjectively chosen in this study that those schools with standardized OCI scores greater than +0.30 had "strong cultures"; those with standardized scores between 0.00 to +0.29 had "moderate cultures"; those with standardized scores between –0.29 to –0.01 had "weak cultures"; and those smaller than –0.30 had "conflicting cultures," although different researchers might have more stringent or lenient criteria in the choice of divisions. By such divisions, there were 6 schools with strong cultures, 12 schools with moderate cultures, 3 schools with weak cultures and 6 schools with conflicting cultures.

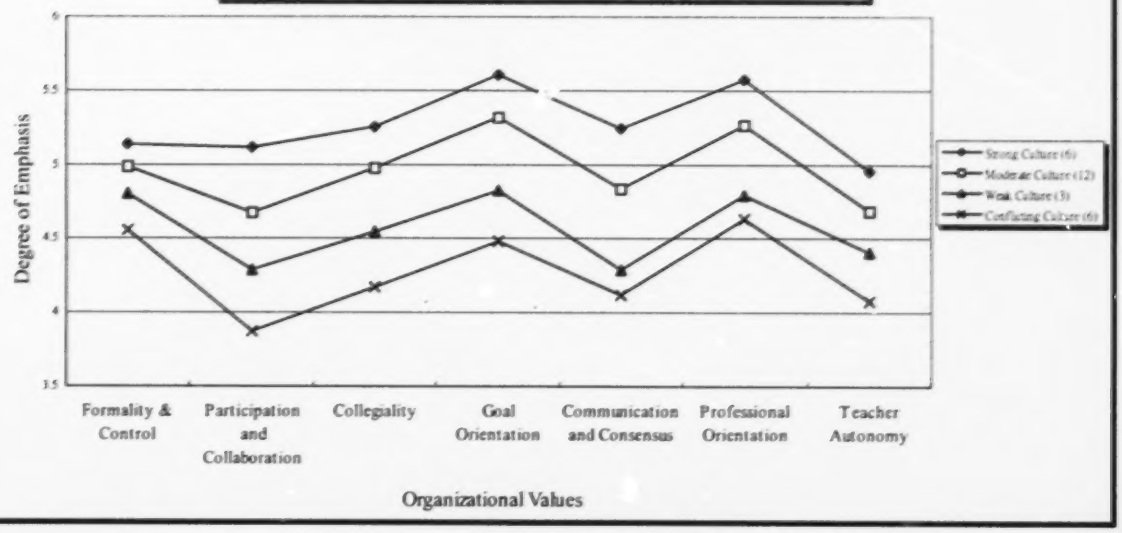
Figure 2. The OCIs of 27 High Schools in Shanghai



Managerial Practices in High Schools of Different Strengths of Organization Cultures

Figure 3 shows the profiles of managerial practices in the 27 Shanghai high schools of different strengths of organizational cultures. Schools were classified into four categories as "strong culture," "moderate culture," "weak culture" and "conflicting culture" according to their standardized scores of OCIs. Afterwards, their degrees of emphasis on the seven subscales of organizational values were aggregated into means according to these four categories. Figure 3 reveals that the degrees of emphasis on the subscales of organizational values generally decreased from schools of strong culture to schools of moderate culture, to those of weak culture and, in turn, to those of conflicting culture. That is, when the strength of organizational cultures increased, the schools' emphases on Formality and Control, Participation and Collaboration, Collegiality, Goal Orientation, Communication and Consensus, Professional Orientation and Teacher Autonomy generally increased. There were six schools of strong organizational cultures, in which there were strong leadership and quality management emphasizing all subscales of organizational values. In addition to strong tradition in hierarchical structure, formality and bureaucratic control, the managerial style in these schools was also of cultural, since they stressed simultaneously participation, collaboration, collegiality, communication, consensus, professionalism, and teacher autonomy in the daily operation of these schools. Teachers in these schools generally satisfied with the schools' daily managerial practices and accepted with the ways that the schools were operated. There were also six schools of conflicting cultures. In contrast to all other schools, the managerial style in these schools of conflicting cultures was laissez-faire, since these schools emphasized all the subscales less than did their counterparts. Teachers in these schools generally dissatisfied with the schools' daily managerial practices and disagreed with the ways that the schools were operated. There were 12 schools of moderate cultures and three schools of weak cultures with various degrees of emphases on the seven subscales of organizational values.

Figure 3. Organizational Values of 27 High Schools by Strength of Organizational Culture



The Effects of Organizational Values on Organizational Culture

In addition to the analysis of managerial practices in schools of different strengths of organizational cultures, multiple regression was used to analyze the separate contribution of organizational values to variation in sharing of these values between teachers and schools. In the analysis, the Total Values Similarity (TVS) scores were treated as a dependent variable, whereas the seven subscales of Schools' Espoused Values (SEV) were treated as independent variables. The analysis examined the effects of schools' espoused values (the managerial practices) on the degree of sharing of these values (the strength of organizational culture). Accordingly, a multiple regression analysis was performed and the results are shown in Table 3.

Table 3. Standard Multiple Regression of the Total Values Similarity Score on the Seven Subscales of Schools' Espoused Values

	Total Values Similarity Score		
Subscales of Schools' Espoused Values	Standardized Regression Coefficients	t-values	Significance
Formality and Control	-0.107	-5.705	0.000
Participation and Collaboration	0.298	9.111	0.000
Collegiality	0.162	4.807	0.000
Goal Orientation	0.136	4.056	0.000
Communication and Consensus	0.235	7.101	0.000
Professional Orientation	0.076	2.490	0.013
Teacher Autonomy	0.119	4.318	0.000

Note.
1. All figures are provided as betas, i.e., standardized regression coefficients.
2. Multiple R = 0.857; R^2 = 0.734; Adjusted R^2 = 0.733; R is the correlation between the obtained and predicted values for the dependent variable; R^2 is proportion of variation in the dependent variable that is predictable from the best linear combination of the independent variables; adjusted R^2 is the total percentage of variability of the dependent variable predicted by all independent variables collectively (Tabachnick and Fidell, 1989, p. 135).

The results in Table 3 show that, all seven subscales of SEV contributed significantly to predictions of sharing of values between teachers and schools. The TVS scores regressed positively and significantly on all these predictors, except Formality and Control, which regressed negatively and significantly. Altogether, 73.3% of the variability in the TVS scores was predicted by knowing the scores of Formality and Control, Participation and Collaboration, Collegiality, Goal Orientation, Communication and Consensus, Professional Orientation and Teacher Autonomy in the schools' daily management. The implication is that when schools attempt to enhance the degree of sharing of organizational values with their teachers, they should emphasize more participation, collaboration, collegiality, goal orientation, communication, consensus, professional orientation and teacher autonomy but emphasize less formality and control in the daily managerial practices. If school administrators are to strengthen the schools' organizational cultures, proper emphases on

these seven subscales of organizational values seem to be the effective strategies to do so. The following are some suggestions, according to the above research findings, for administrators in Shanghai high schools when they plan to build a quality management culture in a school.

First of all, there should be a low degree of formalization and control in the school's daily managerial practices. The school management should stress the partnership between administrators and teachers rather than the superordinate-subordinate relationship. Standardized procedures and official rules should be limited. The school should be less centralized and hierarchical in the structure of control.

Secondly, the school should emphasize participation and collaboration and there should be a strong collegial relationship. The administrative environment should be democratic and open and the sharing of leadership and decision-making should be stressed. The school should encourage a high spirit of cooperation among teachers, administrators, and the principal. Teachers should be allowed to suggest the areas for the school's evaluation. An atmosphere of trust, respect, and empathy should prevail. Teachers and administrators should provide constructive feedback to each other regularly. Teachers should be encouraged to meet on a regular basis to learn from each other and to share their knowledge and experiences. Barriers between departments and among teachers and administrators should be broken down. A kind of intellectual sharing that could lead to consensus and promoted feelings of unity and commonality among the staff should be encouraged.

Thirdly, the school should be goal-oriented and should emphasize both communication and consensus in school management. The school should have clear goals, visions and philosophy, all of which should be widely shared among the staff. A school development plan that gives an overview of the school goals should be written down. At the beginning of school year, the school's general goals should be explained to the new teachers. The school should have good communication channels built in the management system, both vertically and horizontally. Administrators should make themselves visible and approachable around the school to communicate and discuss the goals, visions, and philosophy of the school making it a part of the discourse of education. Teachers should be kept well informed on matters of importance to them and be provided with information of changes to programs as completely and accurately as possible. All group members should participate in proposing and evaluating suggestions. The principal should always explain to teachers why a decision has been made and persuade them to accept it. Thus inter-group conflicts can be minimized and cohesiveness within and between departments can be fostered.

Fourthly, the school should be professionally oriented and should allow teachers a lot of discretion in the workplace. Teachers should be encouraged to develop themselves professionally and be allowed to evaluate their own performance and set goals for their own growth. The organizational structure should give considerable autonomy to the departments within schools. Within the broader system requirements, teachers should be allowed to make their own judgments on curriculum and pedagogy that they consider worthwhile for students. Teachers should have freedom to engage in a variety of practices that they think important. The school should not be highly centralized and should have an atmosphere conducive to innovation.

Conclusions and Comments

This study is designed to contribute to a better understanding of the specific area of organizational theory within the field of educational administration. Contemporary research on school culture is limited. There have been numerous analyses of corporate cultures and interpolations of those findings to public schools, but few researchers have tested those findings directly in schools. In this context, this study may make a significant contribution to the existing stock of knowledge on school culture. Although culture has become fashionable in education, much of the recent discussions on school culture remain analytical, philosophical, and rhetorical rather than empirical. The intent of this study is to provide empirical information and insights about teacher perceptions of school cultures for policy-makers and school administrators in the Shanghai education system.

This study is likely to contribute to clarifying some concepts. It has been claimed in many cases that 'strong culture' is central to high organizational performance (Deal and Kennedy, 1982; Sathe, 1983; Wilkins and Ouchi, 1983). This study attempts to examine the concepts of 'strong culture', 'weak culture', and 'conflicting culture' by measuring the degree of sharing of values within schools. The strength of culture is quantified in this study with different dimensions of shared values in schools. Furthermore, it is hoped that the elements of school culture are operationalized and measured with the construction of questionnaire, the School Values Inventory. This study provides an instrument to understand and assess the elements of school culture.

As far as the researchers know, there are no research studies on school culture in the Shanghai education system and no similar study adopting the proposed theoretical framework developed by the researchers. Culture, no matter in macro (societal) or micro (organizational) views, varies from place to place and from time to time. Nevis (1983) has identified the significant differences in cultural assumptions underlying management concepts between corporations in the United States and in China and the differences between the United States and China in the pattern of hierarchy of needs. The findings of this study may potentially reveal the organizational cultures of schools in Shanghai, which will serve the base for comparison of school cultures in the East and West and also serve to compare the organizational cultures of the schools in Hong Kong and Shanghai.

In this study, the researchers successfully developed a 50-item instrument, the *School Values Inventory* (SVI) Form V (a Chinese version in simplified characters), for Shanghai high schools for the evaluation of daily managerial practices. The SVI Form V with seven subscales of organizational values as performance indicators covers a full spectrum of managerial practices in schools, including formality and control, participation and collaboration, collegiality, goal orientation, communication and consensus, professional orientation and teacher autonomy. The SVI assesses both schools' espoused values (SEV) and teachers' personal values (TPV), which, in turn, generates the Total Values Similarity (TVS) scores at the teacher level and the Organizational Culture Index (OCI) at the school level. Both the TVS and OCI are good indicators of the strength of organizational cultures in schools. In this study, out of the sample of 27 Shanghai primary schools, 6 schools were identified with a "strong culture", 12 schools with a "moderate culture", 3 schools with a "weak culture", and 6 schools with a "conflicting culture."

The research findings show that there were diverse views between teachers and the schools regarding the ways that a school should be operated. Teachers generally preferred the schools to place greater emphases on all subscales of organizational values, except formality and control. Especially, teachers preferred to have greater participation and collaboration in

school management, increased communication and consensus about the schools' goals, missions, and philosophy and greater discretion in their daily work. It is these gaps that the schools' administrators should manage. Such phenomena also matched the managerial practices in schools of different strengths of organizational cultures. In schools with strong culture, that is, greater degrees of sharing of organizational values between teachers and the schools than their counterparts, there were greater emphases on participation and collaboration, collegiality, goal orientation, communication and consensus, professional orientation and teacher orientation. If school administrators in a Shanghai high school are to enhance the sharing of organizational values between teachers and the schools, to strengthen the organizational culture and to build a quality management culture within the school, they should decentralize school management to the teacher level and should emphasize participation, collaboration, collegiality, goal orientation, communication, consensus, professional orientation and teacher autonomy in the daily managerial practices.

References

Cheng, K. M. (1990). Financing Education in Mainland China: What are the Real Problems? *Issues and Studies*, 26, 3, 54-75.

Cheung, M. S. (1997). Running a Good School is the Pre-requisite to High Quality Education. Paper presented in the Shanghai-Hong Kong Joint Conference of Educational Collaboration and Development, Shanghai, East China Normal University, October, 28-29. (in Chinese)

Deal, T. E. (1985). The Symbolism of Effective Schools. *The Elementary School Journal*, 85, 601-619.

Deal, T. E. and Kennedy, A. A. (1982). *Corporate Culture: The Rites and Rituals of Corporation Life.* Reading, MA: Addison-Wesley.

Education Commission (1997). *Education Commission Report No. 7: Quality School Education*. Hong Kong: The Government Printer.

Fan, Z. X. (1992). The Reform of China's Rural Education and its Management System. Paper presented in the 7th Regional Conference of Commonwealth Council for Educational Administration, August 1992, Hong Kong.

Getzels, J. W. and Guba, E. G. (1957). Social Behavior and the Administrative Process. *School Review, 65*, 423-441.

Hong Kong, Government of (1990). *The Basic Law of the Hong Kong Special administrative Region of The People s Republic of China*. Hong Kong: The Committee for the Basic Law of the Hong Kong special Administrative region of the People s Republic of China.

Ji, Q. S. (1992). The Challenges of Future Society and the Way Out for School Education. Paper presented in the 7th Regional Conference of Commonwealth Council for Educational Administration, August 1992, Hong Kong.

Lo, L. N. K. (1993). The Changing Educational System: Dilemma of Disparity. In Joseph Cheng Yu-Shek and Maurice, Brosseau (Eds.). *China Review 1993*. Hong Kong: The Chinese University Press.

Nevis, E. C. (1983). Cultural Assumptions and Productivity: The United States and China. *Sloan Management Review, 24*, Spring, 17-29.

Pang, N.S.K. (1996). School Values and Teachers' Feelings: A LISREL Model. *Journal of Educational Administration, 34*(2), 64-83.

Pang, N.S.K. (1998a). The Binding Forces That Hold School Organizations Together. *Journal of Educational Administration, 36*(3&4), 314-333.

Pang, N.S.K. (1998b). Organizational Values and Cultures of Secondary Schools in Hong Kong. *Canadian and International Education, 27*(2), 59-84.

Pang, N.S.K. (1998c). Managerial Practices in Hong Kong Primary Schools. *Journal of Basic Education, 8*(1), Winter, 21-42.

Pepper, S. (1995). Regaining the Initiative for Education Reform and Development. In Lo Chi Kin, Suzaane Pepper, Tsui Kai Yuen (Eds.). *China Review*. Hong Kong: The Chinese University Press.

Sathe, V. (1983). Implications of Corporate Culture: A Manager's Guide to Action. *Organizational Dynamics*, Autumn, pp. 5-23.

Schein, E. H. (1985, 1992). *Organization Culture and Leadership: A Dynamic View*. San Francisco: Jossey-Bass Inc.

Sergiovanni, T. (1987). 'The Theoretical Basis for Cultural Leadership. In L. T. Shieve and M. B. Schoenheit (Eds.). *Leadership: Examining the Elusive* (pp. 116-129). Alexandria, VA: Association for Supervision and Curriculum Development.

Shaw, J. and Reyes, P. (1992). School Cultures: Organizational Value Orientation and Commitment. *Journal of Educational Research, 85*(5), pp. 295-302.

Tabachnick, B. G. and Fidell, L. S. (1989). *Using Multivariate Statistics* (2nd Ed.). New York: Harper Collins Publishers.

Wang, C. H. (1994). The Strategies of Educational Development for the Po Tung District in Shanghai Before the Year 2010. Paper presented at the 3rd International Conference of Education in the Chu Xiang Delta, December, 14-17.

Wilkins A., & Ouchi, W. (1983). Efficient culture: Exploring the relationship between culture and organizational performance. *Administrative Science Quarterly, 28*, 468-81.

Wu, C. H. (1993). School Management: A Case Analysis. *Shanghai Education*. Vol. 2. (in Chinese)

Xiao, J. and Tsang, M. (1999). Human Capital Development in an Emerging Economy: The Experience of Shenzhen, China. *The China Quarterly*. 157, pp. 72-114.

Yun, Z. S. and Shang M. X. (1992). The School for the Future: A 10-year Experiment Case of the Systematic Reform of School Education. Paper presented in the 7th Regional Conference of Commonwealth Council for Educational Administration, August 1992, Hong Kong.